Monitor

User Manual

The color and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

SAMSUNG

Table Of Contents

MAJOR SAFETY PRECAUTIONS

Before You Start 1-1
Custody and Maintenance 1-2
Cleaning the Monitor 1-3
Safety Precautions 1-4

INSTALLING THE PRODUCT

Package Contents 2-1
Installing the Stand 2-2
Connecting the monitor 2-3
Kensington Lock 2-4

USING THE PRODUCT

Standard Signal Mode Table 3-1
Installing the Device Driver 3-2
Product Operating Buttons 3-3
Using the Screen Adjustment Menu (OSD: On Screen Display) 3-4

TROUBLESHOOTING

Monitor Self-Diagnosis 4-1
Before Requesting Service 4-2
FAQ 4-3

MORE INFORMATION

Specifications 5-1
Power Saving Function 5-2
Contact SAMSUNG WORLD WIDE 5-3
Responsibility for the Pay Service (Cost to Customers) 5-4
Correct Disposal of This Product
(Waste Electrical & Electronic Equipment) 5-5

1 Major Safety Precautions

1-1 Before You Start

Icons used in this manual

ICON	NAME	MEANING
	Caution	Indicates cases where the function may not work or the setting may be canceled.
	Note	Indicates a hint or tip to operate a function.

Using this Manual

- Make yourself fully aware of the safety precautions before using this product.
- If a problem occurs, refer to the 'Troubleshooting' section.

Copyright Notice

The contents of this manual are subject to change without prior notice for performance improvement.

Copyright © **2012 Samsung Electronics Co., Ltd. All Rights Reserved.**

The copyright of this manual is reserved by Samsung Electronics, Co., Ltd.

The contents of this manual may not be partially or in whole reproduced, distributed or used in any form without the written permission of Samsung Electronics, Co., Ltd.

Microsoft, Windows and Windows NT are the registered trademarks of Microsoft Corporation.

VESA, DPM and DDC are the registered trademarks of the Video Electronics Standard Association.

- An administration fee may be charged if either
  - (a) an engineer is called out at your request and there is no defect in the product (i.e. where you have failed to read this user manual).
  - (b) you bring the unit to a repair centre and there is no defect in the product (i.e. where you have failed to read this user manual).
- The amount of such administration charge will be advised to you before any work or home visit is carried out.

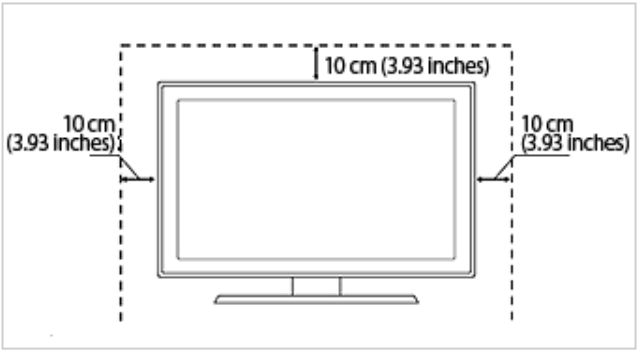
1-2 Custody and Maintenance

Securing the Installation Space

- Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation. Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature. Install the product so the required distances shown in the figure are kept.

  The appearance may differ depending on the product.

When installing the product with a stand



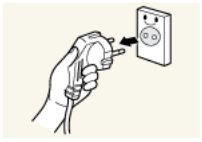
About persistent images

- Displaying a still image for a long time may create a persistent image or stain on the screen. If you do not use the product for a long time, set the power-saving mode or screen saver.

1-3 Cleaning the Monitor

Cleaning the Monitor

- The panel and exterior of the cutting-edge monitor scratch easily and require careful attention. Clean the monitor according to the following steps.



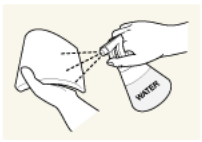
1. Power off the monitor and PC.
2. Disconnect the power cable from the monitor.

> To avoid electric shock, be sure you disconnect the cable by gripping the plug and do not touch the cable with wet hands.

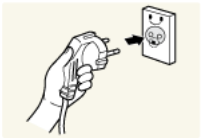
3. Wipe the monitor using a soft, slightly damp cloth that has been squeezed .

- Do not use a cleaning agent that contains alcohol or solvents, or that is surface active. Otherwise, the exterior may discolor or crack or the panel coating may come off.

- Do not spray water or cleaning agent directly onto the monitor. Otherwise, the liquid may sink into the monitor and cause a fire, electric shock, or failure.



4. Clean the exterior of the monitor using a soft cloth dampened with a small amount of water.



5. Connect the power cable to the monitor after you have finished cleaning.
6. Power on the monitor and PC.

Precautions for Storage

- Using an ultrasonic humidifier may cause white stains on a highly glossy product.

> Be sure you contact the nearest service center (paid service) for cleaning the inside of the monitor.

Icons used for safety precautions

ICON	NAME	MEANING
	Warning	Failing to follow the precautions marked with this sign, may result in a serious injury or even a fatality.
	Caution	Failing to follow the precautions marked with this sign, may result in a personal injury or property damage.

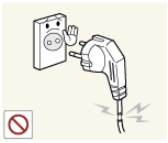
Meaning of Signs

	Do not perform.		Must be followed.
	Do not disassemble.		The power plug must be unplugged from the wall outlet.
	Do not touch.		Must be grounded to prevent electric shock.

Power Related

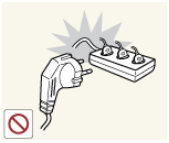
The product image used in the following pictures for your reference may look different from the actual product.

Warning



Avoid using a damaged power cord or plug or a loose power outlet.

- Otherwise, it may result in electric shock or fire.

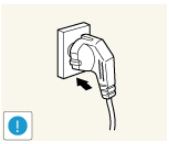


Avoid connecting multiple electric appliances to a single wall outlet.

- Otherwise, it may result in fire due to overheating of the wall outlet.

Avoid plugging in or unplugging the power supply with wet hands.

- Otherwise, it may result in electric shock.



Plug the power plug in firmly.

- Otherwise, it may result in fire.

Make sure to connect the power cord to a grounded wall outlet (for insulation class 1 equipment only).

- Otherwise, it may result in electric shock or injury.

Avoid bending or twisting the power cord excessively and avoid placing heavy objects on the cord.

- Otherwise, it may result in electric shock or fire due to a damaged power cord.

Keep the power cord and the product away from a heater.

- Otherwise, it may result in electric shock or fire.

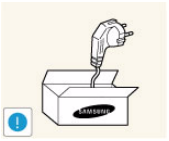
If the pins of the power plug or the wall outlet are covered in dust, clean it using a dry cloth.

- Otherwise, it may result in fire.

Caution

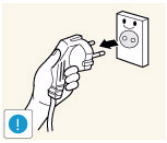
Avoid unplugging the power plug while the product is operating.

- Otherwise, it may damage the product due to electric shock.



Make sure to use only the power cord supplied by our company. In addition, do not use the power cord of another electric appliance.

- Otherwise, it may result in electric shock or fire.



When unplugging the power plug from the wall outlet, make sure to hold it by the plug and not by the cord.

- Otherwise, it may result in electric shock or fire.

Connect the power plug to a wall outlet that can be easily reached.

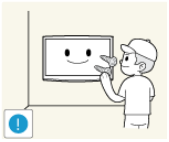
- When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.

Installation Related

Warning

AVOID PLACING BURNING CANDLES, MOSQUITO-REPELLENT OR CIGARETTES ON THE PRODUCT AND INSTALLING THE PRODUCT NEAR A HEATER.

- Otherwise, it may result in fire.

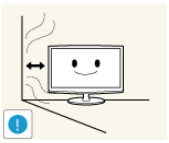


Ask an installation engineer or relevant company to install the product onto the wall.

- Otherwise, it may result in injury.
- Make sure to use the specified wall mount.

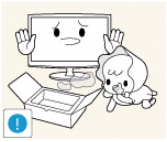
Avoid installing the product in a badly-ventilated location such as inside a bookshelf or closet.

- Otherwise, it may result in fire due to internal over-heating.



Keep a distance of at least 10 cm from the wall when installing the product for ventilation.

- Otherwise, it may result in fire due to internal over-heating.



Keep the plastic bags used to pack the product away from children.

- If children place the plastic bags over their heads, they may suffocate.

Avoid installing the product in a location that is unstable or exposed to excessive vibrations such as on an unstable or slanted shelf.

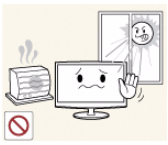
- The product may fall and this may result in damage to the product or injury.
- If you use the product in a location exposed to excessive vibrations, it may result in a problem with the product or fire.

Avoid installing the product in a location exposed to dust, moisture (sauna), oil, smoke or water (rain drops) and installing it within a vehicle.

- This may result in electric shock or fire.

Avoid installing the product at an easily reachable height where children may reach it.

- If a child touches the product, the product may fall and this may result in injury.
- Since the front part is heavier, install the product on a flat and stable surface.



Avoid installing the product in a location exposed to direct sunlight and installing the product near a heat source such as a fire or heater.

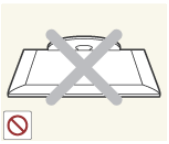
- This may shorten the product life cycle or cause fire.

Edible oil, such as soybean oil, can damage or deform the product. Do not install the product in a kitchen or near a kitchen counter.

Caution

Do not let the product drop while moving it.

- This may result in a problem with the product or injury.



Do not place the product face down on the floor.

- This may damage the panel of the product.

When installing the product on a console or shelf, make sure that the front of the product does not protrude out of the console or shelf.

- Otherwise, this may cause the product to fall off and result in a malfunction or injury.
- Make sure to use a cabinet or shelf suitable to the size of the product.

When putting the product down, handle it gently.

- Otherwise, it may result in a problem with the product or injury.

If the product is installed in a location where the operating conditions vary considerably, a serious quality problem may occur due to the surrounding environment. In this case, install the product only after consulting one of our service engineers about the matter.

- Places exposed to microscopic dust, chemicals, too high or low temperature, high humidity, such as airports or stations where the product is continuously used for a long time and so on.

Usage Related

Warning

Since a high voltage runs through the product, never disassemble, repair or modify the product yourself.

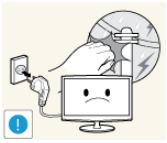
- Otherwise, it may result in fire or electric shock.
- If the product needs to be fixed, contact a service center.

If the product generates a strange noise, a burning smell, or smoke, unplug the power plug immediately and contact a service center.

- Otherwise, it may result in electric shock or fire.

If you drop the product or the case is damaged, turn the power off and unplug the power cord. Contact a service center.

- Otherwise, it may result in fire or electric shock.

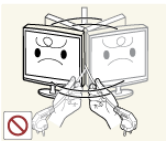


During a lightning or thunderstorm, power off the product and remove the power cable.

- Otherwise, it may result in electric shock or fire.

Do not move the product by pulling the power cord or any cable.

- Otherwise, the power cable may be damaged and product failure, an electric shock or fire may result.



Avoid lifting up or move the product by holding only the power cord or signal cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.

Before moving the product, turn off the power switch and disconnect the power cable and all other connected cables.

- Otherwise, the power cord may be damaged and a fire or electric shock may result.

Avoid letting children to hang or climb onto the product.

- Otherwise, it may result in the product falling and this may result in injury or death.

Avoid placing objects such as toys and cookies on top of the product.

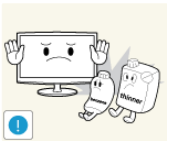
- If a child hangs over the product to grab an object, the object or the product may fall and this may result in injury or even death.

Avoid dropping an object over the product or cause impact to the product.

- Otherwise, it may result in electric shock or fire.

When a gas leak occurs, do not touch the product or the power plug and ventilate immediately.

- A spark may result in an explosion or fire.



Avoid using or placing inflammable spray or objects near the product.

- This may result in an explosion or fire.

Take care not to block the vent by a table cloth or curtain.

- Otherwise, it may result in fire due to internal overheating.

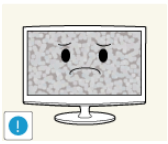
Avoid inserting metal objects such as a chopsticks, coins or hairpins, or inflammable objects into the product (the vents, ports, etc).

- If water or an alien substance enters the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Avoid placing a liquid container such as a vase, flowerpot, beverage, cosmetics or drugs, or a metal object over the product.

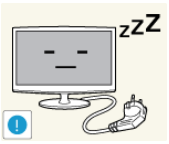
- If water or an alien substance enters the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Caution



Displaying a still image for a long time may create a persistent image or stain on the screen.

- If you do not use the product for a long time, use the power-saving mode or set the screensaver to the moving picture mode.

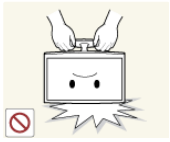


When not using the product for a long time such as leaving your home, unplug the power cord from the wall outlet.

- Otherwise, it may cause dust accumulation and result in fire caused by overheating or short circuit or result in an electric shock.

Set the appropriate resolution and frequency for the product.

- Otherwise, it may result in eye strain.

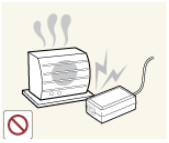


Avoid turning the product upside down or move the product holding only the stand.

- This may cause the product to fall resulting in damage to the product or injury.

Do not place the adapter on top of another adapter.

- Otherwise, it may result in fire.

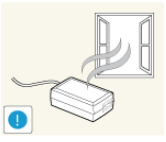


Keep power adaptor away from any other heat source.

- Otherwise, it may result in fire.

Remove the vinyl cover of the adapter before using the adaptor.

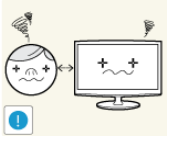
- Otherwise, it may result in fire.



Always keep power adaptor in well-ventilated area.

Be careful that adaptor should not be in contact with water and therefore not be wet.

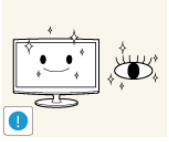
- This may cause a malfunction, electric shock or fire. Do not use adaptor by the waterside or outside particularly when it rains or snows. Be careful that adaptor should not be wet while cleaning floor with water.



Watching the product from too close a distance continuously may damage your eyesight.

Avoid using a humidifier or cooker near the product.

- Otherwise, it may result in electric shock or fire.



It is important to give your eyes some rest (5 minutes every hour) when viewing the product screen for long periods of time.

- This will alleviate any eye strain.

Since the display panel is hot after using it for a long time, do not touch the product.

Keep small accessories away from the children.

Take care when adjusting the angle of the product or the height of the stand.

- If your hand or finger is caught, you may be injured.
- If the product is tilted excessively, the product may fall and this may result in injury.

Avoid placing a heavy object over the product.

- Otherwise, it may result in a problem with the product or injury.

Maintaining the Correct Posture when Using this Product

Maintain the correct posture when using this product.

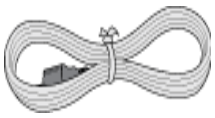
- Straighten your back.
- Keep a distance of 45~50 cm from your eyes to the screen. Look down at the screen and face the screen forwards.
- Adjust the angle of the product so that light is not reflected onto the screen.
- Keep your elbow at a right angle and keep your arm level with the back of your hand.
- Keep your elbow at a right angle.
- Place your heels flat on the ground while keeping your knees at an angle of 90 degrees or higher and maintain the position of your arm so that your arm is below your heart.

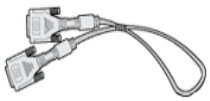
2 Installing the Product

2-1 Package Contents

- Unpack the product and check if all of the following contents have been included.
- Store the packaging box in case you need to move the Product at a later stage.

Monitor

CONTENTS			
Quick Setup Guide	Warranty Card (Not available in all locations)	User Manual	DC-Adapter
			
Power Cord	Stand	Stand Connector	

OPTION			
			
D-Sub Cable	DVI Cable	headphone holder	screws

The cables provided may vary depending on the product you purchase.

2-2 Installing the Stand

Before assembling the product, put the product down on a flat and stable surface (table, etc.) with the screen facing down.

Lay a soft blanket on the table for protection. Next, place the product with the screen facing down onto the blanket.

Insert the Stand Connector into the Stand in the direction shown by the figure.

Install the Stand Connector into the Stand by rotating as shown in the figure.

Check if the Stand Connector is firmly connected.

Turn the connecting screw at the bottom of the stand fully so that it is completely fixed.

Put the headphone holder in the place shown by figure and then turn the connecting screws fully so that it is completely fixed.

Hold the main body of the product with your hand as shown by the figure.

Push the assembled stand into the main body in the direction of the arrow as shown in the figure.

- Caution

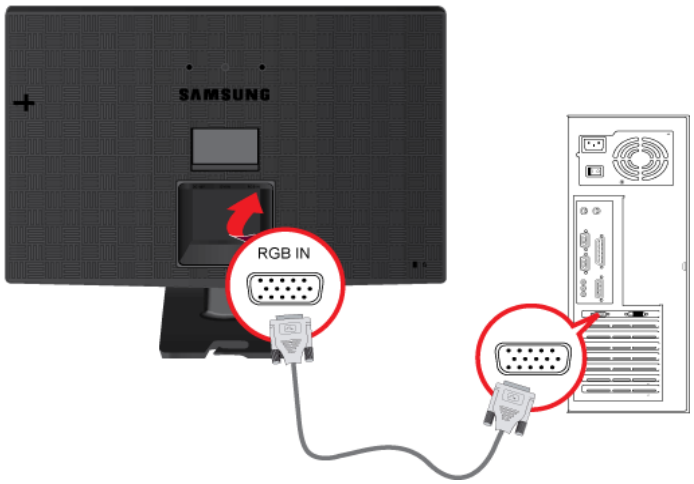
Never lift the product by holding only the stand.

More force may be required to detach the stand from the product than when it was attached.

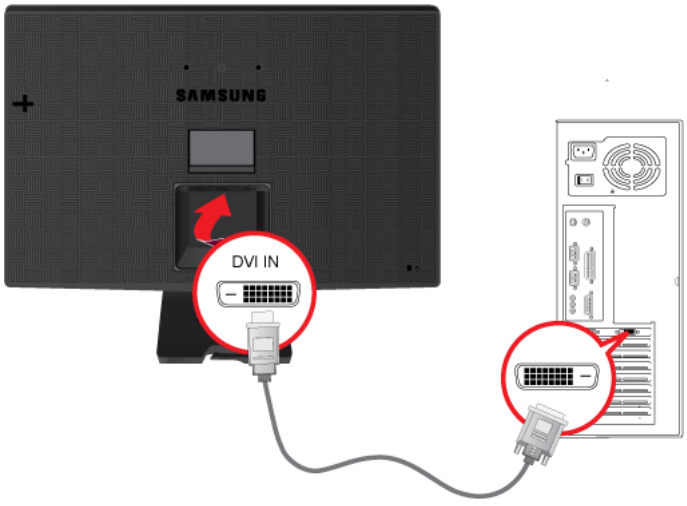
Connecting with a PC

- The connecting part may differ depending on the product model.
- Do not connect the power cable until all connections are completed.

- Connect the product to a PC depending on the video output supported by the PC.
  - When the graphics card provides D-Sub (<Analog>) output
    - Connect the [RGB IN] port of the product to the [D-Sub] port of the PC with the D-Sub cable.



  - When the graphics card provides DVI(<Digital>) output
    - Connect the [DVI IN] port of the product to the [DVI] port of the PC with the DVI cable.



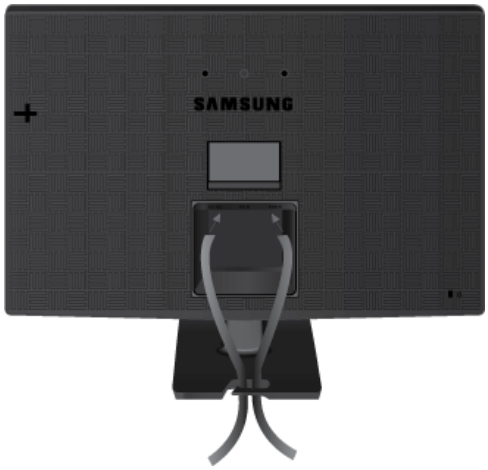
The [DVI IN] terminal is supplied for the digital (DVI)-dedicated models only.

- Connect the power adapter to [DC] jack on the rear of the product. Connect the power cord to the adapter and wall socket.

(The input voltage is switched automatically.)

When the product is connected to a PC, you can turn the product on and use it.

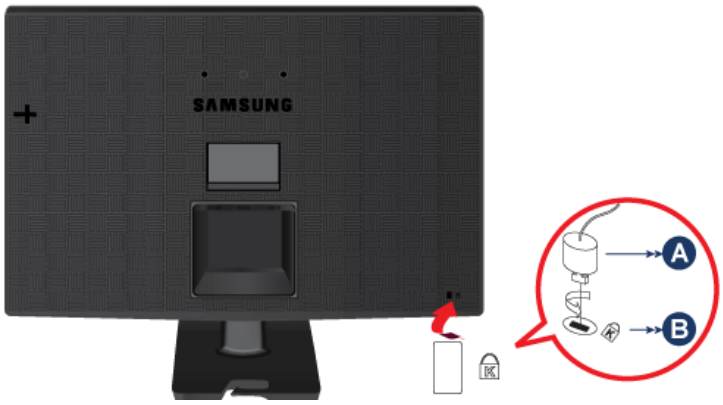
- Cables can be fixed as shown.



2-4 Kensington Lock

A Kensington Lock is an anti-theft device that enables users to lock the product so that they can safely use it in public locations. Since the shape and usage of the locking device may differ depending on the model and the manufacturer, for more information, refer to the User Manual supplied with the locking device for more information.

You must purchase the Kensington Lock separately.



To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as a desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
3. Insert the locking device into the Kensington slot on the Monitor(B).
4. Lock the lock(A).

- These are general instructions. For exact instructions, see the User Manual supplied with the locking device.
- You can purchase the locking device from an electronics store, an online shop, or our service center.

3 Using the product

3-1 Standard Signal Mode Table

This product delivers the best picture quality when viewed under the optimal resolution setting. The optimal resolution is dependent on the screen size.

Therefore, the visual quality will be degraded if the optimal resolution is not set for the panel size. It is recommended setting the resolution to the optimal resolution of the product.

If the signal from the PC is one of the following standard signal modes, the screen is set automatically. However, if the signal from the PC is not one of the following signal modes, a blank screen may be displayed or only the Power LED may be turned on. Therefore, configure it as follows referring to the User Manual of the graphics card.

For the optimal resolution, refer to the Specifications.

S24B240BL/S24B240KL

DISPLAY MODE	HORIZONTAL FREQUENCY (KHZ)	VERTICAL FREQUENCY (HZ)	PIXEL CLOCK (MHZ)	SYNC POLARITY (H/V)
IBM, 720 X 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
MAC, 1152 x 870	68.681	75.062	100.000	-/-
VESA, 640 x 480	31.469	59.940	25.175	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 720	45.000	60.000	74.250	+/+
VESA, 1280 x 800	49.702	59.810	83.500	-/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
VESA, 1440 x 900	55.935	59.887	106.500	-/+
VESA, 1440 x 900	70.635	74.984	136.750	-/+
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 1920 x 1080	67.500	60.000	148.500	+/+

S27B240B/S27B240K

DISPLAY MODE	HORIZONTAL FREQUENCY (KHZ)	VERTICAL FREQUENCY (HZ)	PIXEL CLOCK (MHZ)	SYNC POLARITY (H/V)
IBM, 720 X 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
MAC, 1152 x 870	68.681	75.062	100.000	-/-
VESA, 640 x 480	31.469	59.940	25.175	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 720	45.000	60.000	74.250	+/+
VESA, 1280 x 800	49.702	59.810	83.500	-/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
VESA, 1440 x 900	55.935	59.887	106.500	-/+
VESA, 1440 x 900	70.635	74.984	136.750	-/+
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 1920 x 1080	67.500	60.000	148.500	+/+

Horizontal Frequency

The time taken to scan one line from the left-most position to the right-most position on the screen is called the horizontal cycle and the reciprocal of the horizontal cycle is called the horizontal frequency. The horizontal frequency is represented in kHz.

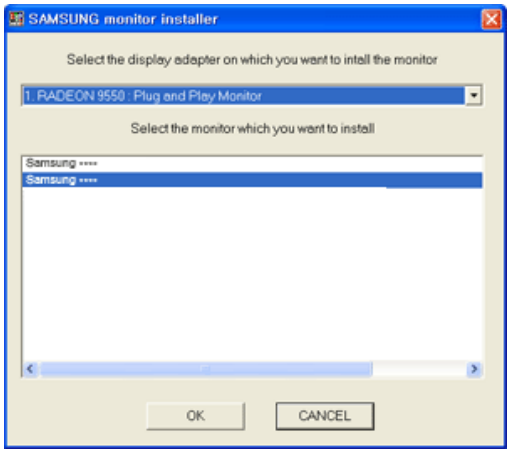
Vertical Frequency

A panel must display the same picture on the screen tens of times every second so that humans can see the picture. This frequency is called the vertical frequency. The vertical frequency is represented in Hz.

3-2 Installing the Device Driver

If the device driver is installed, you can set the resolution and frequency to the optimal configuration for the product. The device driver is included on the CD-ROM supplied with the product. If the supplied drive file is corrupted, please visit a service center or Samsung Electronics website(http://www.samsung.com/), and download the driver.

1. Insert the driver installation CD-ROM into the CD-ROM drive.
2. Click on "Windows Driver".
3. Complete the remaining installation steps according to the instructions displayed on the screen.
4. Select the model of your product from the model list.


SAMSUNG monitor installer
Select the display adapter on which you want to intall the monitor
1. RADEON 9550 : Plug and Play Monitor
Select the monitor which you want to install
Samsung ****
Samsung ****
OK
CANCEL

5. Check if the appropriate resolution and screen refresh rate are displayed in the Control Panel settings. For more information, refer to the document about the Windows operating system.

Product Operating Buttons

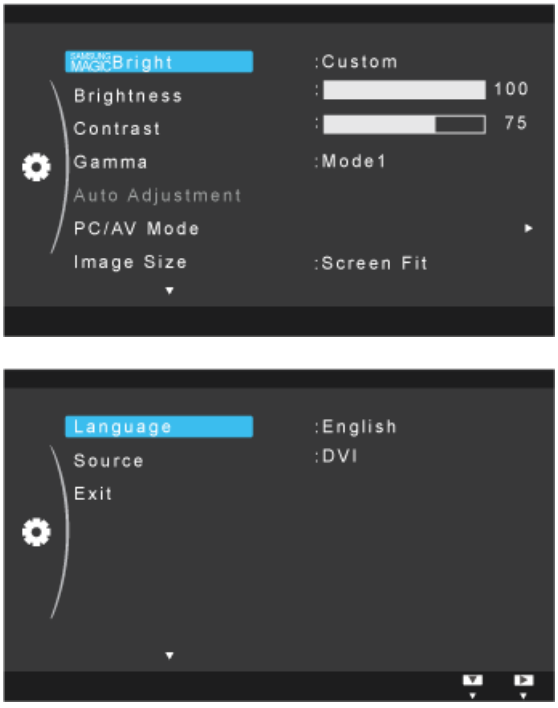
ICON	DESCRIPTION
MENU / ▼	1. Press this button to display the On Screen Display (OSD). 2. When in the menu, press this button to move down to the option below, or adjust values in the OSD.
OSD Adjustment Lock	This function locks the OSD in order to maintain the current settings or to prevent the settings from being changed by another person. On: If you press and hold this button down for 10 seconds, the OSD Adjustment Lock function is activated. Off: If you press and hold this button down for 10 seconds again, the OSD Adjustment Lock function is disabled. Even if the OSD Adjustment Lock function is activated, users can still use that function key to adjust the brightness,contrast and also can exit the OSD.
/	1. When OSD is not displayed, press this button to power on/off the monitor. 2. When OSD is displayed, press this button to access sub OSD, or activate the OSD menu.
Power LED	This LED is turned on when the product works normally. For more information on the power-saving function, refer to the power saving function in More Information. When not using the product for a long time, unplugging the power cord is recommended to minimize power consumption.

3-4 Using the Screen Adjustment Menu (OSD: On Screen Display)

The Screen Adjustment Menu (OSD: On Screen Display) Structure

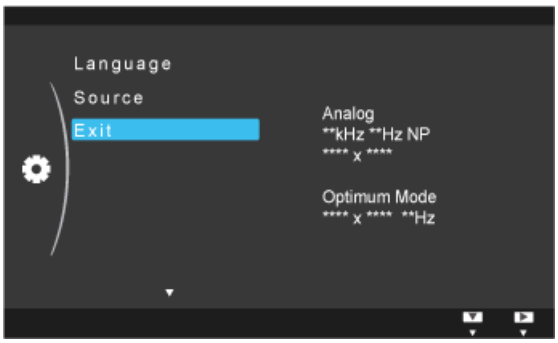
TOP MENUS	SUB MENUS				
	SAMSUNG MAGIC Bright	Brightness	Contrast	Gamma	Auto Adjustment
	PC/AV Mode	Image Size	Language	Source	Exit

Monitor functions may vary according to models. Please refer to actual product.



MENU	DESCRIPTION
SAMSUNG MAGIC Bright	Provides preset picture settings optimized for various user environments such as editing a document, surfing the Internet, playing games,or movies and so on. • <Custom> If the preset picture modes are not sufficient, users can configure the <brightness> and <Contrast> directly using this mode. • <Standard> This mode provides the picture setting appropriate for editing a document and surfing the Internet (text + picture). • <Game> This mode provides the picture setting appropriate for playing games that include lots of graphics and that require a fast screen refresh rate. • <Cinema> This mode provides brightness and sharpness settings similar to those of a TV for the best entertainment environment (movie, DVD, etc.). • <Dynamic Contrast> Controls the picture contrast automatically so that bright and dark pictures are balanced overall.
Brightness	Controls the screen brightness. This menu is unavailable when <SAMSUNG MAGIC Bright> is set to <Dynamic Contrast> mode.

MENU	DESCRIPTION
Contrast	Controls the contrast of the pictures displayed on the screen This menu is unavailable when <SAMSUNG MAGICBright> is set to <Dynamic Contrast> or <Cinema> mode.
Gamma	Using this menu, you can change the intensity of the colors of medium brightness. • <Mode1> - <Mode2> - <Mode3> This menu is unavailable when <SAMSUNG MAGICBright> is set to <Dynamic Contrast> or <Cinema> mode.
Auto Adjustment	You can adjust the screen settings automatically. This function is only available in Analog mode.
PC/AV Mode	Set to PC when connected to a PC. Set to AV when connected to an AV device. This function does not support Analog mode.
Image Size	**PC signals** • <Auto> - The picture is displayed at the aspect ratio of the input signal. • <Wide> - The picture is displayed in full screen regardless of the aspect ratio of the input signal. • A signal not in the standard mode table is not supported. • If the resolution is set to the optimal resolution, the aspect ratio does not change whether the <Image Size> is set to <Auto> or <Wide>. **AV signals** • <4 : 3> - Displays pictures at the 4:3 aspect ratio. • <16 : 9> - Displays pictures at the 16:9 aspect ratio. • <Screen Fit> - If a 720P or 1080P signal is input in DVI input mode, the picture is displayed as is without truncation. This can only be set when the external input is connected through DVI and <PC/AV Mode> is set to <AV>.
Language	Select a language for the OSD. • **Deutsch, English,Español,Français,Italiano,Magyar,Polski, Português,Русский,Svenska,Türkçe,日本語, 한국어 ,汉语** The selected language is only applied to the product OSD. This setting does not affect the other functions of the PC.

MENU	DESCRIPTION
Source	Using this menu, you can change the input signal (Analog/DVI). If the monitor is in power saving mode or is displaying the message <Check Signal Cable>, press " **MENU / ▼** " to display the OSD.In this OSD press " ⇄ / ⏻ " and " **MENU / ▼** " to change the input signal (Analog/DVI).
Exit	You can exit the OSD. Shows the frequency and resolution set on the PC. 

4 Troubleshooting

4-1 Monitor Self-Diagnosis

- You can check if the product is working properly using the Self-Diagnosis function.
- If a blank screen is displayed and the Power LED blinks even if the product and the PC are properly connected, perform the self-diagnosis function according to the procedures below.

1. Turn the product and the PC off.
2. Separate the signal cable from the product .
3. Turn the product on.
4. If the product is working properly, the <Check Signal Cable> message appears.
   In this case, if a blank screen is displayed again, make sure that there is no problem with the PC and the connection. The product is working properly.

4-2 Before Requesting Service

Please check the following before requesting After-Sales service. If the problem continues, please contact your nearest Samsung Electronics Service Center.

A BLANK SCREEN APPEARS / I CANNOT TURN THE PRODUCT ON	
Is the power cord connected properly?	Check the connection status of the power cord.
Is the <Check Signal Cable> message displayed on the screen?	(Connected using the D-sub cable) Check the cable connecting the PC and the product. (Connected using the DVI cable) When cables are connected correctly and the monitor displays this message, press“ MENU / ▼ ”button to display OSD, then press“ ⇄ / ⏻ ”and “ MENU / ▼ ”buttons to choose input signal.
Is the <Not Optimum Mode> message displayed on the screen?	This occurs when the signal from the graphics card exceeds the maximum resolution or the maximum frequency of the product. In this case, set up the appropriate resolution and the frequency for the product.
Is a blank screen displayed and does the power LED blink at a 1 second interval?	1. This occurs when the power saving function is running. If you click the mouse or press any key, the screen will be turned on. 2. If the <Check Signal Cable > condition persists for more than five minutes, the power saving function will be activated.
Did you connect with a DVI cable?	If you connect the DVI cable when the PC has booted up or if you reconnect the DVI cable after disconnecting the cable while using a PC, the screen may not be displayed because some graphics cards do not output the video signal. In this case, reboot the PC while the DVI cable is connected.
THE IMAGE IS TOO LIGHT OR TOO DARK.	
Adjust the <Brightness> and <Contrast>. (Refer to the <Brightness>, <Contrast>) If <SAMSUNG MAGIC Bright> is set to <Dynamic Contrast>, the display brightness can differ according to the input signal.	
THE COLOR IS WEIRD / THE PICTURE IS DISPLAYED IN BLACK AND WHITE	
Is the entire screen displayed in the same color as if viewing the screen through a cellophane paper?	Check the cable connection to the computer. Reinsert the graphics card into the computer completely.
Is the graphics card configured correctly?	Set up the graphics card referring to the user manual.
THE DISPLAY AREA SUDDENLY MOVES TO AN EDGE OR TO THE CENTER.	
Did you change the graphics card or the driver?	Turn on “Auto Adjustment” function in the OSD menu.
Did you change the resolution and frequency appropriate to the product?	Set the resolution and the frequency to the appropriate values in the graphics card refer to the (Standard Signal Mode Table)
Is the graphics card configured correctly?	Set up the graphics card referring to the user manual.

THE PICTURES ARE OUT-OF-FOCUS.	
Did you change the resolution and the frequency appropriate to the product?	Set the resolution and the frequency to the appropriate values in the graphics cardrefer to the (Standard Signal Mode Table)
THE COLOR IS DISPLAYED IN 16 BIT (16 COLORS). THE COLOR HAS BEEN CHANGED AFTER CHANGING THE GRAPHICS CARD.	
Did you install the device driver for the product?	Windows XP : Set the color again by selecting Control Panel → Appearance and Themes → Display → Settings. Windows ME/2000 : Set the color again by selecting Control Panel → Display → Settings. Windows Vista : Change the color settings by selecting Control Panel → Appearance and Personalization → Personalization → Display settings. Windows 7 : Change the color settings by selecting Control Panel → Appearance and Personalization → Display → Adjust resolution → Advanced settings → Monitor. Windows 8 : Change the color settings by selecting Settings → Control Panel → Appearance and Personalization → Display → Adjust resolution → Advanced settings → Monitor. (For more information, refer to the Windows user manual for the computer.)
Is the graphics card configured correctly?	Configure the color again in accordance with the new graphics card driver.
WHEN I CONNECT THE MONITOR, THE 'UNKNOWN MONITOR, PLUG&PLAY (VESA DDC) MONITOR FOUND' MESSAGE IS DISPLAYED.	
Did you install the device driver for the product?	Install the device driver referring to the descriptions about the driver installation.
Check if all the Plug&Play (VESA DDC) functions are supported referring to the User Manual of the graphics card.	Install the device driver referring to the descriptions about the driver installation.
WHEN I LOOK AT THE EXTERIOR EDGES OF THE PRODUCT, SMALL ALIEN SUBSTANCES APPEAR ON IT.	
Since this product is designed so that the color has a soft appearance by coating it with a transparent material over the black edges, such things may be seen. This is not a defect of the product.	
A “BEEP, BEEP” SOUND IS HEARD WHEN BOOTING THE COMPUTER.	
If the beep sound is generated 3 or more times when booting up the computer, please request service for the computer.	

4-3 FAQ

FAQ!	PLEASE TRY THE FOLLOWING!
How can I change the frequency?	Set the frequency on your graphics card. Windows XP : Go to Control Panel ⟶ Appearance and Themes ⟶ Display ⟶ Settings ⟶ Advanced ⟶ Monitor, and adjust Refresh rate under Monitor Settings. Windows ME/2000 : Go to Control Panel ⟶ Display ⟶ Settings ⟶ Advanced ⟶ Monitor, and adjust Refresh rate under Monitor Settings. Windows Vista : Go to Control Panel → Appearance and Personalization → Personalization → Display settings ⟶ Advanced settings ⟶ Monitor, and adjust Refresh rate under Monitor Settings. Windows 7 : Go to Control Panel → Appearance and Personalization → Display → Screen Resolution ⟶ Advanced settings ⟶ Monitor, and adjust Refresh rate under Monitor Settings. Windows 8 : Go to Settings ⟶ Control Panel → Appearance and Personalization → Display → Screen Resolution ⟶ Advanced settings ⟶ Monitor, and adjust Refresh rate under Monitor Settings.
How can I change the resolution?	Windows XP : Go to Control Panel → Appearance and Themes → Display → Settings, and adjust the resolution. Windows ME/2000 : Go to Control Panel → Display → Settings, and adjust the resolution. Windows Vista : Go to Control Panel → Appearance and Personalization → Personalize → Display settings, and adjust the resolution. Windows 7 : Go to Control Panel → Appearance and Personalization → Display → Adjust resolution, and adjust the resolution. Windows 8 : Go to Settings ⟶ Control Panel → Appearance and Personalization → Display → Adjust resolution, and adjust the resolution.
How do I set power-saving mode?	Windows XP: Set power-saving mode in Control Panel → Appearance and Themes → Display → Screen Saver Settings or BIOS SETUP on the PC. Windows ME/2000: Set power-saving mode in Control Panel → Display → Screen Saver Settings or BIOS SETUP on the PC. Windows Vista: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC. Windows 7: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC. Windows 8 : Set power-saving mode in Settings ⟶ Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC.

5 More Information

5-1 Specifications

MODEL NAME		S24B240BL/S24B240KL	S27B240B/S27B240K
Panel	Size	23.6 inches (59 cm)	27 inches (68 cm)
	Display area	521.28 mm (H) x 293.22 mm (V)	597.89 mm (H) x 336.31 mm (V)
	Pixel Pitch	0.2715 mm (H) x 0.2715 mm (V)	0.3114 mm (H) x 0.3114 mm (V)
Synchroniza-tion	Horizontal	30 ~ 81 kHz	
	Vertical	56 ~ 75 Hz	
Display Color		16.7 M	
Resolution	Optimum resolution	1920 x 1080 @ 60 Hz	
	Maximum resolution	1920 x 1080 @ 60 Hz	
Input Signal, Terminated		RGB Analog, DVI(Digital Visual Interface) Compliant Digital RGB 0.7 Vp-p ± 5% Separate H/V sync, Composite, SOG TTL level (V high ≥ 2.0V, V low ≤ 0.8V)	
Maximum Pixel Clock		164MHz (Analog,Digital)	
Power Supply		This product supports 100-240 V.Since the standard voltage may differ from country to country, please check the label on the back of the product.	
Signal Cable		15pin-to-15pin D-sub cable, Detachable DVI-D to DVI-D connector, Detachable	
Dimensions (WxHxD) / Weight		558.5 x 361.2 x 49.4 mm (22.0 x 14.2 x 1.9 inches) (Without Stand) 558.5 x 432.1 x 222.7 mm (22.0 x 17.0 x 8.77 inches) (With Stand) / 8.6 lbs (3.9 kg)	644.8 x 414.2 x 50.7 mm (25.4 x 16.3 x 2.0 inches) (Without Stand) 644.8 x 485.2 x 222.7 mm (25.4 x 19.1 x 8.77 inches) (With Stand) / 9.7 lbs (4.4 kg)
Environmental considerations	Operating	Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C) Humidity :10 % ~ 80 %, non-condensing	
	Storage	Storage Temperature : -4°F ~ 113°F (-20°C ~ 45°C) Humidity : 5 % ~ 95 %, non-condensing	
Tilt		-1.0°(±2.0°) ~20.0°(±2.0°)	

- Design and specifications are subject to change without prior notice.
- This device is a Class B digital apparatus.
- Panel Dots (Pixels)

  Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may appear brighter or darker on the panel. This does not affect product performance.

(USA ONLY)

Dispose unwanted electronics through an approved recycler.

To find the nearest recycling location, go to our website,

www.samsung.com/recyclingdirect, or call (877) 278 - 0799

5-2 Power Saving Function

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor to low-power mode when it has not been used for a certain amount of time. The monitor automatically returns to normal operation when you press a key on the keyboard. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The PowerSaver system operates with a VESA DPM compliant video card installed in your computer. Use the software utility installed on your computer to set up this feature.

STATE	NORMAL OPERATION	POWER SAVING MODE	POWER OFF
Power Indicator	On	Blinking	Off
Power Consumption (S24B240BL/S24B240KL)	30 watts	Typical 0.3 watts	Typical 0.3 watts
Power Consumption (S27B240B/S27B240K)	40 watts	Typical 0.4 watts	Typical 0.4 watts

If there is no power cut-off switch, the power consumption is "0" only when the power cord is disconnected.

5-3 Contact SAMSUNG WORLD WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

NORTH AMERICA		
U.S.A	1-800-SAMSUNG (726-7864)	http://www.samsung.com
CANADA	1-800-SAMSUNG (726-7864)	http://www.samsung.com/ca (English) http://www.samsung.com/ca_fr (French)
MEXICO	01-800-SAMSUNG (726-7864)	http://www.samsung.com
LATIN AMERICA		
ARGENTINE	0800-333-3733	http://www.samsung.com
BOLIVIA	800-10-7260	http://www.samsung.com
BRAZIL	0800-124-421 4004-0000	http://www.samsung.com
CHILE	800-SAMSUNG(726-7864) From mobile 02-482 82 00	http://www.samsung.com
COLOMBIA	01-8000112112	http://www.samsung.com
COSTA RICA	0-800-507-7267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
DOMINICA	1-800-751-2676	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
ECUADOR	1-800-10-7267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
EL SALVADOR	800-6225	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
GUATEMALA	1-800-299-0013	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
HONDURAS	800-27919267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
JAMAICA	1-800-234-7267	http://www.samsung.com

LATIN AMERICA		
NICARAGUA	00-1800-5077267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
PANAMA	800-7267	http://www.samsung.com/latin (Spanish) http://www.samsung.com/latin_en (English)
PERU	0-800-777-08	http://www.samsung.com
PUERTO RICO	1-800-682-3180	http://www.samsung.com
TRINIDAD & TOBAGO	1-800-SAMSUNG (726-7864)	http://www.samsung.com
VENEZUELA	0-800-100-5303	http://www.samsung.com
EUROPE		
AUSTRIA	0810 - SAMSUNG (7267864, € 0.07/min)	http://www.samsung.com
BELGIUM	02-201-24-18	http://www.samsung.com/be (Dutch) http://www.samsung.com/be_fr (French)
BOSNIA	05 133 1999	http://www.samsung.com
BULGARIA	07001 33 11 , normal tariff	http://www.samsung.com
CROATIA	062 SAMSUNG (062 726 7864)	http://www.samsung.com
CYPRUS	8009 4000 only from landline (+30) 210 6897691 from mobile and land line	http://www.samsung.com
CZECH	800 - SAMSUNG (800-726786)	http://www.samsung.com
	Samsung Electronics Czech and Slovak, s.r.o., Oasis Florenc, Sokolovská 394/17, 180 00, Praha 8	
DENMARK	70 70 19 70	http://www.samsung.com
EIRE	0818 717100	http://www.samsung.com
ESTONIA	800-7267	http://www.samsung.com
FINLAND	09 85635050	http://www.samsung.com
FRANCE	01 48 63 00 00	http://www.samsung.com
GERMANY	0180 5 SAMSUNG bzw. 0180 5 7267864* (*0,14 €/Min. aus dem dt. Festnetz, aus dem Mobilfunk max. 0,42 €/Min.)	http://www.samsung.com
GREECE	80111-SAMSUNG (80111 726 7864) only from land line (+30) 210 6897691 from mobile and land line	http://www.samsung.com
HUNGARY	06-80-SAMSUNG (726-7864)	http://www.samsung.com
ITALIA	800-SAMSUNG (726-7864)	http://www.samsung.com

EUROPE		
LATVIA	8000-7267	http://www.samsung.com
LITHUANIA	8-800-77777	http://www.samsung.com
LUXEMBURG	261 03 710	http://www.samsung.com
MONTENEGRO	020 405 888	http://www.samsung.com
NETHERLANDS	0900-SAMSUNG (0900-7267864) (€ 0,10/Min)	http://www.samsung.com
NORWAY	815 56480	http://www.samsung.com
POLAND	0 801-1SAMSUNG (172-678) +48 22 607-93-33	http://www.samsung.com
PORTUGAL	808 20-SAMSUNG (808 20 7267)	http://www.samsung.com
RUMANIA	08008 SAMSUNG (08008 726 7864) TOLL FREE No.	http://www.samsung.com
SERBIA	0700 Samsung (0700 726 7864)	http://www.samsung.com
SLOVAKIA	0800 - SAMSUNG (0800-726 786)	http://www.samsung.com
SPAIN	902 - 1 - SAMSUNG (902 172 678)	http://www.samsung.com
SWEDEN	0771 726 7864 (SAMSUNG)	http://www.samsung.com
SWITZERLAND	0848 - SAMSUNG (7267864, CHF 0.08/min)	http://www.samsung.com/ch (German) http://www.samsung.com/ch_fr (French)
U.K	0330 SAMSUNG (7267864)	http://www.samsung.com

CIS		
ARMENIA	0-800-05-555	http://www.samsung.com
AZERBAIJAN	088-55-55-555	http://www.samsung.com
BELARUS	810-800-500-55-500	http://www.samsung.com
GEORGIA	0-800-555-555	http://www.samsung.com
KAZAKHSTAN	8-10-800-500-55-500 (GSM: 7799)	http://www.samsung.com
KYRGYZSTAN	00-800-500-55-500	http://www.samsung.com
MOLDOVA	0-800-614-40	http://www.samsung.com
MONGOLIA	+7-800-555-55-55	http://www.samsung.com
RUSSIA	8-800-555-55-55	http://www.samsung.com
TADJIKISTAN	8-10-800-500-55-500	http://www.samsung.com
UKRAINE	0-800-502-000	http://www.samsung.com/ua (Ukrainian) http://www.samsung.com/ua_ru (Russian)
UZBEKISTAN	8-10-800-500-55-500	http://www.samsung.com

ASIA PACIFIC		
AUSTRALIA	1300 362 603	http://www.samsung.com
CHINA	400-810-5858	http://www.samsung.com
HONG KONG	(852) 3698 4698	http://www.samsung.com/hk (Chinese) http://www.samsung.com/hk_en (English)
INDIA	1800 1100 11 3030 8282 1800 3000 8282 1800 266 8282	http://www.samsung.com
INDONESIA	0800-112-8888 021-5699-7777	http://www.samsung.com
JAPAN	0120-327-527	http://www.samsung.com
MALAYSIA	1800-88-9999	http://www.samsung.com
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	http://www.samsung.com
PHILIPPINES	1-800-10-SAMSUNG (726-7864) for PLDT 1-800-3-SAMSUNG (726-7864) for Digitel 1-800-8-SAMSUNG (726-7864) for Globe 02-5805777	http://www.samsung.com
SINGAPORE	1800-SAMSUNG (726-7864)	http://www.samsung.com
TAIWAN	0800-329-999 0266-026-066	http://www.samsung.com
THAILAND	1800-29-3232 02-689-3232	http://www.samsung.com
VIETNAM	1 800 588 889	http://www.samsung.com
MIDDLE EAST		
BAHRAIN	8000-4726	http://www.samsung.com/ae (English) http://www.samsung.com/ae_ar (Arabic)
EGYPT	08000-726786	http://www.samsung.com
IRAN	021-8255	http://www.samsung.com
JORDAN	800-22273 065777444	http://www.samsung.com
KUWAIT	183-2255	http://www.samsung.com/ae (English) http://www.samsung.com/ae_ar (Arabic)
MOROCCO	080 100 2255	http://www.samsung.com

MIDDLE EAST		
OMAN	800-SAMSUNG (726-7864)	http://www.samsung.com/ae (English) http://www.samsung.com/ae_ar (Arabic)
SAUDI ARABIA	9200-21230	http://www.samsung.com/ae (English) http://www.samsung.com/ae_ar (Arabic)
TURKEY	444 77 11	http://www.samsung.com
U.A.E	800-SAMSUNG (726-7864)	http://www.samsung.com

AFRICA		
ANGOLA	91-726-7864	http://www.samsung.com
BOTSWANA	0800-726-000	http://www.samsung.com
CAMEROON	7095- 0077	http://www.samsung.com
COTE D' IVOIRE	8000 0077	http://www.samsung.com
GHANA	0800-10077 0302-200077	http://www.samsung.com
KENYA	0800 724 000	http://www.samsung.com
NAMIBIA	8197267864	http://www.samsung.com
NIGERIA	0800-726-7864	http://www.samsung.com
SENEGAL	800-00-0077	http://www.samsung.com
SOUTH AFRICA	0860-SAMSUNG (726-7864)	http://www.samsung.com
TANZANIA	0685 88 99 00	http://www.samsung.com
UGANDA	0800 300 300	http://www.samsung.com
ZAMBIA	211350370	http://www.samsung.com

5-4 Responsibility for the Pay Service (Cost to Customers)

When the service is requested, in spite of in warranty, we may charge you for a visit from a service technician in the following cases.

Not a product defect

Cleaning of the product, Adjustment, Explanation, Re-installation and etc.

- If a service technician gives instructions on how to use product or simply adjusts options without disassembling product.
- If a defect is caused by external environmental factors (Internet, Antenna, Wired Signal, etc.).
- If a product is reinstalled or devices are connected additionally after installing the purchased product for the first time.
- If a product is reinstalled to move to a different spot or to move to a different house.
- If customer requests instructions on how to use because of another company's product.
- If customer requests instructions on how to use the network or another company's program.
- If customer requests software installation and setup for the product.
- If a service technician removes/cleans dusts or foreign materials inside of the product.
- If customer requests an installation additionally after purchasing a product through home-shopping or online.

A Product damage caused by customer's fault

Product damage caused by customer's mishandling or wrong repair

If a product damage is caused by;

- external impact or drop.
- use of supplies or separatly sold product unspecified by Samsung.
- repair from a person besides an engineer of outsourcing service company or partner of Samsung Electronics Co., Ltd.
- remodeling or repairing the product by customer.
- using it with incorrect voltage or non-authorised electrical connections.
- not following the "cautions" in User Manual.

Others

- If product fails by natural disaster (lightning, fire, earthquake, flood damage, etc) .
- If consumable components are all used up (Battery, Toner, Fluorescent lights, Head, Vibrator, Lamp, Filter, Ribbon, etc.).

If customer requests a service in case the product has no defect, service fee may be charged. So please read User Manual first.

5-5 Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.